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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,159	12/16/2005	Kinya Miyashita	1752-0175PUS1	9155
2292 7590 04/18/2008 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER				
GATES, ERIC ANDREW				
ART UNIT		PAPER NUMBER		
3726				
NOTIFICATION DATE		DELIVERY MODE		
04/18/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary**Application No.**

10/561,159

Applicant(s)

MIYASHITA, KINYA

Examiner

Eric A. Gates

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Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2005 and 20 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 12/16/05, 4/20/06

DETAILED ACTION

1. This office action is in response to Applicant's initial application filed 16 December 2005 and preliminary amendment filed 20 April 2006.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

3. The information disclosure statement filed 16 December 2005 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Specification

4. The abstract of the disclosure is objected to because it exceeds the allowed length of 150 words. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3, 5, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Federlin et al. (U.S. Patent 5,572,398).

7. Regarding claim 1, Federlin et al. discloses a bipolar electrostatic chuck 10, comprising: a chuck main body 11 having a mounting surface 13; an annular electrode member 15 which is formed in an annular configuration with a center opening and is fixed onto the mounting surface; an inner electrode member 11 which is disposed at a given clearance from the annular electrode member within the center opening of the annular electrode member and is fixed onto the mounting surface; and an outer electrode member 11 which is disposed at a given clearance from the annular electrode member outside of the annular electrode member and is fixed onto the mounting surface, wherein, at the time of assembling, the annular electrode member is fixed onto the mounting surface through an adhesive layer (epoxy), and respectively, the inner electrode member and the outer electrode member constitute a first electrode 11, and the annular electrode member constitutes a second electrode 15, and after use, the annular electrode member can be separated from the mounting surface (it is inherent that the annular electrode member can be separated from the mounting surface by

removing the epoxy or alternative holding means as disclosed by Federlin et al. holding the member to the surface).

Federlin et al. does not disclose the inner electrode member and the outer electrode member are fixed onto the mounting surface through an adhesive layer or the inner electrode member, and the outer electrode member can be separated from the mounting surface.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made the top surface of the body portion 11 as separate inner and outer electrode members, for the purpose of being able to attach them in a similar way to electrode member 15, because it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art.

8. Regarding claim 2, the modified invention of Federlin et al. discloses wherein the chuck main body 11 constitutes the first electrode 11 together with the inner electrode member 11 and the outer electrode member 11.

9. Regarding claim 3, the modified invention of Federlin et al. discloses wherein the mounting surface of the chuck main body has an outer convex portion for positioning the outer electrode member in a heightwise direction with respect to the mounting surface and/or an inner convex portion for positioning the inner electrode member in the heightwise direction with respect to the mounting surface (it is inherent that when the top surface of body portion 11 is made separate to form the inner and outer electrode members that the portions remaining below the electrodes will form inner and outer convex portions for positioning the electrodes in the heightwise direction).

10. Regarding claim 5, the modified invention of Federlin et al. discloses wherein at least one of the inner electrode member, the annular electrode member, and the outer electrode member which are fixed onto the mounting surface of the chuck main body through the adhesive layer is fixed onto the mounting surface of the chuck main body in a complementary configuration with each other (as seen in figure 1 of Federlin et al., the annular electrode member is complementary to the chuck main body).

11. Regarding claim 7, the modified invention of Federlin et al. discloses wherein the inner electrode member, the annular electrode member, and the outer electrode member are made of pure aluminum (see column 3. lines 13-40).

12. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Federlin et al. (U.S. Patent 5,572,398) in view of Chen et al. (U.S. Patent 5,691,876).

13. Regarding claim 4, the modified invention of Federlin et al. discloses the invention substantially as claimed, except Federlin et al. does not disclose wherein positioning pins that position the inner electrode member, the annular electrode member, and the outer electrode member in a horizontal direction with respect to the mounting surface are disposed between the chuck main body, and the inner electrode member, the annular electrode member, and the outer electrode member which are fixed onto the mounting surface of the chuck main body through the adhesive layer, respectively.

Chen et al. teaches the use of positioning pins 120 for the purpose of aligning an electrode member 122 and conductive extensions 116 on support platen 110.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have combined the chuck of Federlin et al. with the positioning pins of Chen et al. in order to more precisely positioning the electrodes prior to attaching them with the adhesive.

14. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Federlin et al. (U.S. Patent 5,572,398) in view of Umetsu et al. (JP Patent 2000-183143 A).

15. Regarding claim 6, the modified invention of Federlin et al. discloses the invention substantially as claimed, except Federlin et al. does not disclose wherein the chuck main body and the annular electrode member have interposed therebetween a positioning spacer for positioning the annular electrode member in the heightwise direction with respect to the mounting surface.

16. Umetsu teaches the use of an insulating spacer 6 for the purpose of preventing an electrode layer from coming into contact with the supporting substrate 5 in the heightwise direction. Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have combined the chuck of Federlin et al. with the spacer of Umetsu et al. in order to more precisely positioning the annular electrode with respect to the chuck main body.

17. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Federlin et al. (U.S. Patent 5,572,398) in view of Herchen (U.S. Patent 5,870,271).

18. Regarding claims 8 and 9, the modified invention of Federlin et al. discloses the invention substantially as claimed, except Federlin et al. does not disclose wherein the adhesive layer is made of one or two materials selected from silicone-based adhesive agent and polyvinyl butyral adhesive agent, or wherein the silicone-based adhesive agent or an elastomer-based adhesive agent.

Herchen teaches the use of an adhesive layer that can be made from silicone containing acrylic adhesive for the purpose adhering the electrode assembly to the chuck. Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have combined the chuck of Federlin et al. with the adhesive of Herchen in order to have an alternative adhesive material for attaching the electrodes to the chuck main body.

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric A. Gates whose telephone number is (571)272-5498. The examiner can normally be reached on Mon-Thurs 8:45 - 6:15.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Monica Carter can be reached on (571) 272-4475. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/E. A. G./
Examiner, Art Unit 3722
13 April 13, 2008

/Monica S. Carter/
Supervisory Patent Examiner, Art Unit 3722